## **ABSTRACT**

The present invention relates to a method for modifying a surface of an interlayer insulating film that is formed by applying a coating solution on a substrate to form a coating film, and sintering the coating film at a predetermined temperature. The method comprises the steps of: heating an inside of a reaction chamber that contains a substrate to a predetermined temperature; and modifying a surface of the interlayer insulating film by supplying an oxidizing gas into the reaction chamber.

10